

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Carolina Alonso

GENERAL INFORMATION:

Name:	Florida Tile Industries, Incorporated
Address:	P.O. Box 447, Lakeland, Florida 33802
Date application received:	November 1, 2005
SIC/Source description:	3253
Source ID:	21-005-00008
Source AI:	31
Activity #:	APE20050006
Permit number:	V-04-031 (Revision 1)

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
___ Administrative	<input checked="" type="checkbox"/> Title V
X Minor	<input checked="" type="checkbox"/> Synthetic minor
___ Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	156.65	2108.70
NO _x	59.00	59.00
CO	156.69	284.32
VOC	36.53	36.53
ZnO ₂	0.15	3.47
7664393- Hydrogen Fluoride	37.94	37.94

SOURCE PROCESS DESCRIPTION:

Florida Tile Industries, Inc currently operates a ceramic floor and wall tile manufacturing facility in Lawrenceburg, Kentucky. The production of tile, traditional or fast-fire, begins at the railcar unloading area, where raw materials are received by truck or railcar and transported through a pipeline using the truck compressor or in the case of the railcar, a Fuller Kenyon pump, to one of six storage silos (EP 01, EP 02, EP 03, EP 53, EP 54, EP 55). Raw materials are transported via conveyors to the Traditional Body Mixer (EP 56), the Fast-Fire Body Mixer (EP 11), or the Blunger System (EP 73) in the Spray Dryer area. Rejected unfired tile (greenware) is recycled in the Traditional and Fast-Fire Rework Systems (EP 58 and EP 16) and used as an additive in the Mixers. Water is added to the raw materials and recycled greenware in the Mixers to form tile body, which is then transported to the Fast-Fire Body Transport System (EP 63) or Traditional Body Transport System (EP 59). Water is added to the raw materials in the Blunger System to form a slurry that is dried in the Spray Dryer (EP 74) to form a tile body material known as prill. The prill is stored in Prill Silos (EP 75).

The mixed fast-fire tile body is transferred by the Fast-Fire Body Transport System to the Press Hoppers for Lines 1 and 2 (EP 95 and EP 96). The mixed traditional tile body is transferred by the Traditional Body Transport System to the Press Hoppers for Lines 3 and 4 (EP 97 and EP 98). The prill is transferred from the Prill Silos to the Press Hoppers for Line 5 (EP 99). The Press Hoppers on each of the lines feed the tile body to the Tile Presses where it is formed into the appropriate tile shape. After pressing, the tile passes through a tile dryer on the line to remove some of the moisture content. Various glazes are then applied to the tile by a variety of glaze application systems, including glaze spray booths and dry glaze booths. Finally, the glazed tile is fired in a kiln. On Lines 1, 2, and 5 Roller Kilns with Pre-dryers (EP 39, EP 42, and EP 29, respectively) are used to fire the tile. On Lines 3 and 4, Tunnel Kilns (EP 42 and 40, respectively) are used.

Florida Tile has been approved to add bisque and tile body raw material milling equipment at the plant. The bisque milling equipment will consist of a Storage Hopper (EP 91), a Pre-Crusher (EP 92), and a Grinding Mill with Vibrating Screen (EP 93). The tile body raw material milling process will consist of Raw Material Storage Piles (EP 90) in a covered area and a Ball Mill (EP 94). This equipment will be located near the Spray Dryer. An additional blunger is also being added to the Blunger System in the Spray Dryer Area and a Prill Transport System (EP 76) is being added to convey spray-dried tile body from the Prill Silos to the presses on Lines 1 and 2. Lastly, Florida Tile is proposing to add two new tile presses and three new glaze applicators to Line 4.

The facility is a Title V major source operating under the authority of Title V Permit No. V-04-031. Florida Tile is applying for a group processing of minor revisions in accordance with an agreement between Florida Tile and the Cabinet.